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## New approaches in low vision rehabilitation

*Thick descriptions of a lighting assessment in a Danish practice*

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# New approaches in low vision rehabilitation: Thick descriptions of a lighting assessment in a Danish practice

## Background

Since their establishment in the 1950s, Danish low vision services have developed and advanced due to new technologies and changing paradigms. Today, rehabilitative approaches are at the forefront: encompassing an active involvement of the citizen based on their health conditions and their social and physical context, in a manner that supports a coherent and meaningful everyday life.

As domestic lighting is crucial for the visually impaired citizen to navigate and perform everyday activities in their home or work environment, a recovery-based lighting assessment has been developed at a low vision centre in Denmark. A pilot study conducted from 2017-19, involved 60 visually impaired citizens, a lighting lab, VR/AR technologies and a mixed methods approach focusing on everyday activities located in the physical and social context of the visually impaired citizen.

From November 2018 the assessment has become the object of study in a postdoc project, aimed to ethnographically observe and describe the assessment, and in co-operation with the low vision consultants, finally improve the approach.

## Methods

The initial fieldwork included observations of 15 consultations in the home environment and in the lighting lab, documentations from in total 180 consultations (60 citizens) and interviews with the two low vision consultants.

The objective of a thick description is to get an understanding of a phenomena in its social and physical context. This is particularly relevant in order to develop transfer knowledge from one context to another. The observations have focused on interactions between 1) everyday practices (of visually impaired, family members and not at least LV consultants), 2) materialities (of bodies, physical environment of the home, including lighting and technologies) and 3) knowledge (of people, in things and practices).

## Findings

The assessment was initiated with a home visit and a narrative interview, focusing on the everyday practices of the citizen and the challenges regarding light. Activities of importance were discussed in dialogue between citizen, family and consultant.

Positioned in the specific location of the activity, the vision and light were measured, due to performance and lux. The consultants were focused on the participant's use of the lighting in order to perform the activity, including the daylight and its different role throughout the day or its seasonal changes. In the lighting lab and after testing different lighting solutions, photos from the specific home environment supported discussions on the spatial organisation, placement of furniture in relation to the overall layout, orientation of arrangement or position of lamps, types of lamps, surfaces.

The observations showed different kinds of knowledge – embodied, embedded, explicit technical knowledge and professional knowledge of the consultants, knowledge that were coordinated, targeted and co-created by the participants throughout the course of the assessment (Øien, 2019).

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## Conclusion

The fieldwork showed that by drawing on embedded, embodied and explicit knowledge, including the professional knowledge of the consultants and the everyday knowledge of the citizens, the lighting assessment mediates the social and physical context of the citizen. These aspects of knowledge are seldom described in intervention design or output, however they are essential in order to improve the approach or to implement the assessment across other low vision practices.

This in-depth investigation will contribute to the Danish low vision rehabilitative practice by establishing a reflexive development of the field and, in the end, improve services for visually impaired citizens

## Acknowledgements

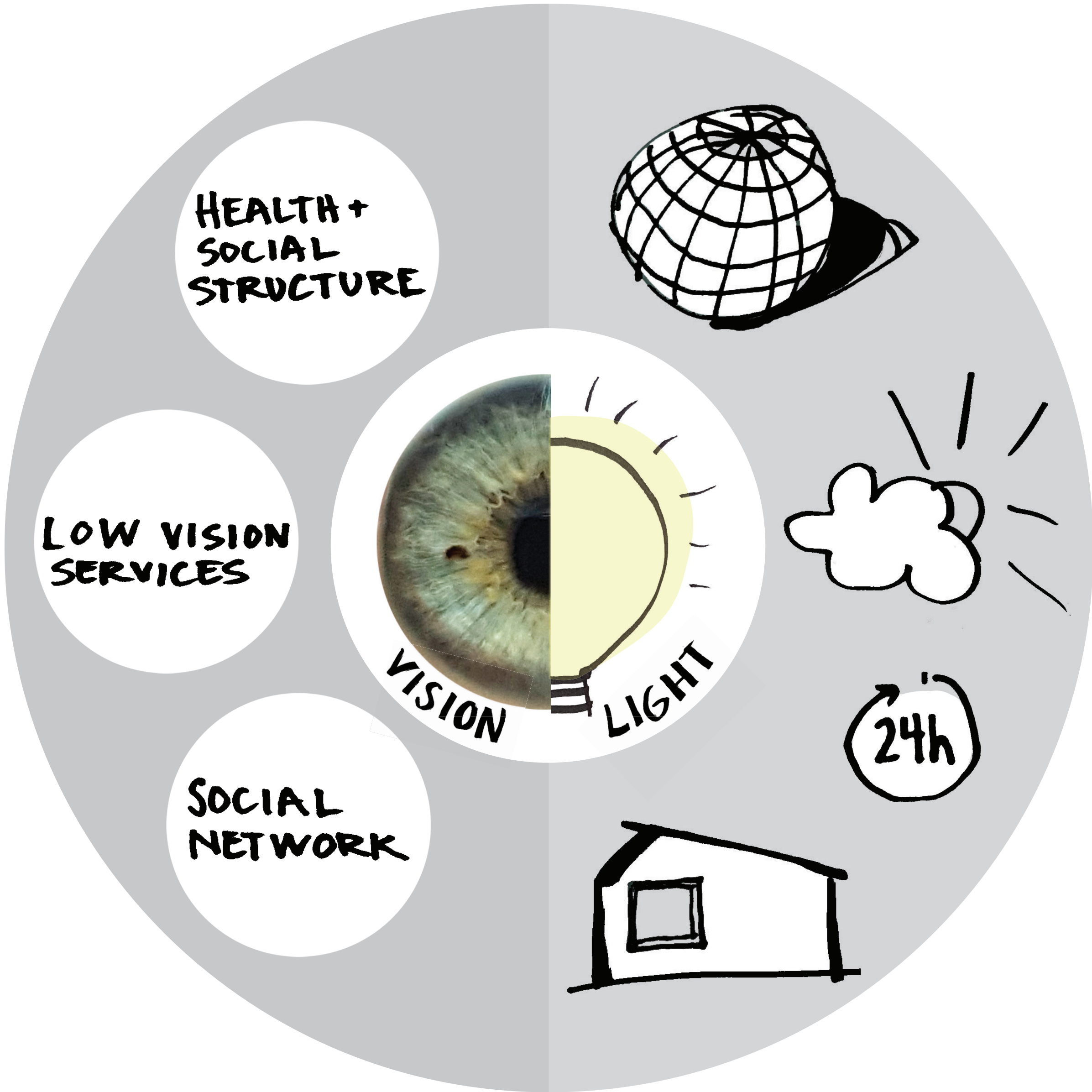
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ABOVE: THE SOCIAL AND THE PHYSICAL  
CONTEXT OF THE REHABILITATIVE APPROACH.

BELOW: THE THREE MAIN ASPECTS OBSERVED  
IN THE LIGHTING ASSESSMENT.

